[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 13227 3/5/2001]

[Docket No. 2000-NM-416-AD; Amendment 39-12128; AD 2001-04-09]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 767 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to all Boeing Model 767 series airplanes. This action requires repetitive testing of the elevator control system to determine if an elevator power control actuator (PCA) is rigged incorrectly due to yielded or failed shear rivets in a bellcrank assembly for the elevator PCA, and follow-on actions, if necessary. This action is necessary to prevent continued operation with yielded or failed shear rivets in a bellcrank assembly for the elevator PCA, which could result in reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective March 20, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 20, 2001.

Comments for inclusion in the Rules Docket must be received on or before May 4, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-416-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2000-NM-416-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Kenneth J. Fairhurst, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1118; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: The FAA has previously issued AD 2000-17-05, amendment 39-11879 (65 FR 51754, August 25, 2000), applicable to certain Boeing Model 767-200, -300, and -300F series airplanes. That AD requires a one-time functional check of the shear rivets in all six bellcrank assemblies for the elevator power control actuators (PCA) to determine the condition of the shear rivets, and replacement or rework of the bellcrank assemblies, if necessary.

Since the issuance of that AD, the FAA has received reports that several Model 767-200, -300, and -300F series airplanes failed the one-time check. Such failures indicate yielded or failed shear rivets in the bellcrank assemblies for the elevator PCA's. This condition, if not corrected, could result in reduced controllability of the airplane.

The FAA has received no factual information that indicates that this condition is related to an accident involving a Boeing Model 767 series airplane that occurred off the coast of Massachusetts. The cause of that accident is still under investigation.

Though the inspections described above apply to only certain Model 767-200, -300, and -300F series airplanes, the FAA finds that this condition may occur on all Model 767 series airplanes. Testing by the manufacturer has revealed that the elevator single hydraulic system check currently required by a Certification Maintenance Requirement (CMR) (documented in the Boeing 767 Maintenance Planning Document as Item Number 27-31-00-5B) may not detect yielded or failed shear rivets in the bellcrank assemblies for the elevator PCA's. Therefore, this AD applies to all Model 767 series airplanes, including future production.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletins 767-27A0168 (for Model 767-200, -300, and -300F series airplanes) and 767-27A0169 (for Model 767-400ER series airplanes), both dated November 21, 2000. The subject of those service bulletins is "Elevator Power Control Actuator (PCA) Bellcrank Repetitive Check." Those service bulletins describe procedures for repetitive tests (referred to in the service bulletins as "checks") of the elevator control system, including specific rigging tests (referred to in the service bulletins as "checks") to determine if the elevator PCA's are rigged incorrectly, and follow-on actions, if necessary.

The test per the service bulletins verifies proper operation of the elevator control system with each of the hydraulic systems pressurized, one at a time. (Three hydraulic PCA's control each elevator surface. For each surface, each PCA is powered by a different airplane hydraulic system.) This portion of the test is equivalent to the existing CMR which is referenced in the "Supplementary Information" section above. Accomplishment of the applicable service bulletin described above is equivalent to accomplishment of the CMR and satisfies the CMR requirement.

The test in the service bulletins also includes instructions to record the rigged elevator surface position for each of the three PCA's. The three positions per surface are compared relative to each other to determine if an elevator PCA is rigged incorrectly. This specific rigging test is not included in the check per the CMR. If an elevator PCA is determined to be rigged incorrectly, the service bulletins specify an inspection to measure the penetration depth of shear rivets in the three elevator bellcrank assemblies of the affected elevator surface. If the measured penetration depth of the shear rivets is less than 0.50 inch, the service bulletins specify either repairing the affected bellcrank assembly by replacing both rivets or replacing the affected bellcrank assembly.

After inspection of the shear rivets, and replacement of the rivets or the bellcrank(s), if necessary, the service bulletins include instructions to adjust the PCA input rods to properly rig each of the elevator PCA's.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to prevent continued operation with yielded or failed shear rivets in a bellcrank assembly for the elevator PCA, which could result in reduced controllability of the airplane. This AD requires accomplishment of the actions specified in the applicable service bulletin described previously, except as discussed below.

Interim Action

This is considered to be interim action. The FAA and the manufacturer are currently developing a terminating action that will positively address the unsafe condition addressed by this AD. Once this terminating action is developed, approved, and available, the FAA may consider additional rulemaking.

Differences Between Service Bulletins and This AD

The service bulletins recommend that the initial check of the bellcranks for the elevator PCA be performed at the next convenient opportunity when the airplane and manpower are available, not to exceed 1,200 flight hours after receipt of the service bulletins. However, this AD requires the initial check within 90 days after the effective date of this AD. In developing this compliance time, among other factors, the FAA considered the urgency of the subject unsafe condition, and the amount of time it takes to do the test (approximately 2 work hours). The FAA finds that 90 days is an optimal amount of time that will allow the test to be done on all affected airplanes without compromising flight safety.

Also, if an inspection of the shear rivets is necessary, the service bulletins ask operators to report inspection results to Boeing if the penetration depth of the shear rivets is less than 0.50 inch during the inspection of the shear rivets of the bellcrank assemblies of the elevator PCA. This AD requires that inspection results be reported to the FAA under these conditions.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2000-NM-416-AD." The postcard will be date-stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the

Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

2001-04-09 BOEING: Amendment 39-12128. Docket 2000-NM-416-AD.

Applicability: All Model 767 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent continued operation with yielded or failed shear rivets on a bellcrank assembly for the elevator power control actuator (PCA), which could result in reduced controllability of the airplane, accomplish the following:

Repetitive Tests

(a) Within 90 days after the effective date of this AD, perform a test of the elevator PCA bellcranks to determine if an elevator PCA is rigged incorrectly due to yielded or failed shear rivets in a bellcrank assembly, per Boeing Alert Service Bulletin 767-27A0168 (for Model 767-200, -300, and -300F series airplanes), or 767-27A0169 (for Model 767-400ER series airplanes), both dated November 21, 2000; as applicable. Repeat the test thereafter at least every 400 flight hours. Accomplishment of these repetitive tests is acceptable for compliance with the functional check of the elevator system required by a Certification Maintenance Requirement that is documented as Item Number 27-31-00-5B in the Boeing 767 Maintenance Planning Document.

Follow-on Actions

(b) If an elevator PCA is determined to be rigged incorrectly during any test per paragraph (a) of this AD, before further flight, do a one-time inspection to measure penetration depth of shear rivets of all three elevator bellcrank assemblies of the affected elevator surface, per Boeing Alert Service Bulletin 767-27A0168 (for Model 767-200, -300, and -300F series airplanes), or 767-27A0169 (for Model 767-400ER series airplanes), both dated November 21, 2000; as applicable.

(1) If the measured penetration depth of the shear rivets on all bellcrank assemblies is 0.50 inch or more: Before further flight, re-rig the elevator PCA correctly per the applicable service bulletin.

(2) If the measured shear rivet penetration depth on any single bellcrank assembly is less than 0.50 inch: Before further flight, repair the bellcrank assembly by replacing the shear rivets or

replace the bellcrank assembly, and reassemble and re-rig the elevator control system, per the applicable service bulletin. Then, do paragraph (c) of this AD.

Reporting Requirement (On-Condition)

(c) If the penetration depth of any of the shear rivets is less than 0.50 inch, submit a report of inspection findings to the Manager, Seattle Aircraft Certification Office (ACO), FAA, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; fax (425) 227-1181. Submit the report at the applicable time specified in paragraph (c)(1) or (c)(2) of this AD. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(1) For airplanes on which the inspection is done after the effective date of this AD: Submit the report within 15 days after doing the inspection required by paragraph (b) of this AD.

(2) For airplanes on which the inspection was done prior to the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except per paragraph (c) of this AD, the actions shall be done per Boeing Alert Service Bulletin 767-27A0168, dated November 21, 2000, or Boeing Alert Service Bulletin 767-27A0169, dated November 21, 2000; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) This amendment becomes effective on March 20, 2001.

FOR FURTHER INFORMATION CONTACT: Kenneth J. Fairhurst, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1118; fax (425) 227-1181.

Issued in Renton, Washington, on February 21, 2001.
Charles D. Huber, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.